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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,353	10/11/2001	Surender Kumar	CM04624H	9535

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SCHAUMBURG, IL 60196

EXAMINER
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CHO, HONG SOL

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/975,353	Applicant(s) KUMAR ET AL.	
	Examiner Hong Cho	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to the amendment filed on 09/23/2005. Claims 1-10 are pending in the instant application.

### ***Claim Rejections - 35 USC § 112, Second paragraph***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites, "issuing commands to the packet network..." but it is not clear where the commands are destined to since a network is not a destination in itself.

Claims 2-8 depend on claim 1 are similarly rejected.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Virgile et al (US 5898686).

Re claim 1, Virgile discloses a communication system including a plurality of sites (figure 3) linked together by a packet network (column 6, lines 55-59). Virgile discloses a bridge b100 with a forwarding table including a multicast address index *(determining first and second multicast IP addresses to be used for a two-party call,* column 7, lines 50-56). Virgile discloses a processor of a bridge configured to retrieve a multicast forwarding table entry that corresponds to a particular multicast group *(issuing commands to the packet network requesting reconfiguration of the packet network,* column 7, lines 55-58) so that packets are transmitted to different multicast groups joined by the hosts *(to enable a first site of the communication system to receive payload for the call via the first multicast IP address and a second site of the communication system to*

*receive payload for the call via the second multicast IP address, column 7, line 66 to column 8, line 13).*

Re claim 2, Virgile discloses a processor receiving a packet containing an indication that a host wishes to join a particular multicast group (*sending, from the first and second site, respective IGMP Join messages identifying the first and second multicast IP addresses to one or more network devices of the packet network, column 9, lines 22-24*).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Virgile in view of Samuel et al (US 6018766), hereinafter referred to as Samuel.

Re claims 3, 5 and 9, Virgile discloses transmitting packets to different multicast groups joined by the hosts (*joining, by the second communication device, the second multicast group address to receive the first payload from the one or more network devices, column 7, line 66 to column 8, line 13*), but fails to disclose receiving, by the

first site, a message identifying a target device associated with the second site, sending the message from the first site to the second multicast IP address, receiving, by the second site, at least a portion of the message via the second multicast IP address and sending the at least a portion of the message from the second site to the target device. Samuel discloses how a packet is delivered to the other hosts. Samuel discloses a host 1 (*source device*) sending a packet to a router 5 (*the first site*), the router 5 sending a packet to a router 8 (*the second site*) through a router 6, and the router 8 sending a packet to a host 3 (*target device*) and receiving a packet through routers 8, 6, and 5 (*receiving, by the first site, a message identifying a target device associated with the second site, sending the message from the first site to the second multicast IP address, receiving, by the second site, at least a portion of the message via the second multicast IP address,; and sending the at least a portion of the message from the second site to the target device,* figure 1; column 4, lines 2-9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Virgile to perform routing of multicast packets as disclosed in Samuel. The benefit is to conserve bandwidth of multicasting network by not transmitting multicast packets into network segments that do not contain any hosts that belong to the multicast group of the multicast packets (column 6, lines 30-36).

Re claims 4 and 10, Virgile discloses transmitting packets to different multicast groups joined by the hosts (*joining, by the first communication device, the first multicast group address to receive the second payload from the one or more network devices,* column 7, line 66 to column 8, line 13), but fails to disclose receiving, by the second site,

a message identifying a target device associated with the first site, sending the message from the second site to the first multicast IP address, receiving, by the first site, at least a portion of the message via the first multicast IP address, and sending the at least a portion of the message from the first site to the target device. Samuel discloses a host 3 (*source device*) sending a packet to a router 8 (*the first site*), the router 8 sending a packet to a router 5 (*the second site*) through a router 6, and the router 5 sending a packet to a host 1 (*target device*) and receiving a packet through routers 8, 6, and 5 (*receiving, by the first site, a message identifying a target device associated with the second site, sending the message from the first site to the second multicast IP address, receiving, by the second site, at least a portion of the message via the second multicast IP address,; and sending the at least a portion of the message from the second site to the target device, figure 1;* column 4, lines 2-9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Virgile to perform routing of multicast packets as disclosed in Samuel. The benefit is to conserve bandwidth of multicasting network by not transmitting multicast packets into network segments that do not contain any hosts that belong to the multicast group of the multicast packets (column 6, lines 30-36).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Virgile in view of Samuel and further in view of Yuan (USPUB 20010041571).

Re claim 6, Virgile discloses all of the limitations of the base claim, but fails to teach moving of source device and target device to a different site during the call, defining a moved communication unit and an old site and a new site for the moved communication unit and receiving, by the new site, a message identifying at least one multicast IP address associated with the call and issuing commands to the packet network requesting reconfiguration of the packet network to enable the new site to receive payload for the call. Yuan discloses a system where mobile end system (MES) migrates out of the area and into the area while still maintaining a data connection to the network (*moving of source device and target device to a different site during the call*). Yuan discloses MES recognizing the new area during cell transfer by listening to a channel identification message broadcast from the mobile database (MDBS) of the second area during channel acquisition (*defining a moved communication unit and an old site and a new site for the moved communication unit*). Yuan discloses, upon detecting the new area, the MES initiating a registration process using the conventional Mobile Network Registration Protocol (MNRP) via the new MDIS. Yuan discloses the new mobile data intermediate system (MDIS) handling the registration for the MES and communicating with the home MDIS (*receiving, by the new site, a message identifying at least one multicast IP address associated with the call and issuing commands to the packet network requesting reconfiguration of the packet network to enable the new site to receive payload for the call*, paragraph [0011]). Since Samuel suggests designing of distributed multicast messaging for interactive applications where groups are rapidly created, changed and destroyed (column 6, lines 60-64), it would have been obvious to



one having ordinary skill in the art at the time the invention was made to modify Samuel to adopt mobile management function of Yuan so that service of interactive applications would be provided to mobile hosts without interruption by providing a mobile host with a procedure for joining and leaving a group as disclosed in Yuan.

*Allowable Subject Matter*

9. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 7 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or fairly suggest a method of receiving a message at a new site from the moved communication unit identifying the first and second multicast IP addresses associated with the call.

Claim 8 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or fairly suggest a method of receiving at the new site a message for requesting the first and second multicast IP addresses associated with the call and a message identifying the first and second multicast IP addresses from a call server.

*Response to Arguments*

10. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent (6147986) to Orsic
- US Patent (6370142) to Pitcher et al

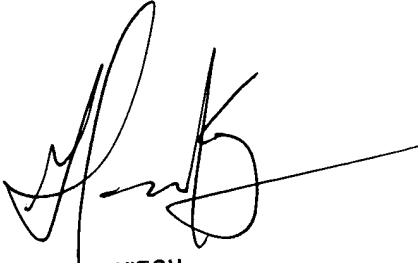
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087.

The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hc  
Hong Cho  
Patent Examiner  
12/13/2005



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